ASX Clear (Futures) Margin Simulator

User Manual

Table of Contents

1. INTRODUCTION 4
1.1. PURPOSE OF ASX CLEAR (FUTURES) MARGIN SIMULATOR 4
1.2. AUDIENCE FOR THIS MANUAL 4
2. SETUP AND ACCESS 5
2.1. SYSTEM SETUP 5
2.2. PARTICIPANT ADMINISTRATOR USER SETUP 5
2.3. PARTICIPANT OPERATOR USER SETUP 5
2.4. ACCESSING ASX CLEAR (FUTURES) MARGIN SIMULATOR 5
2.5. OPERATING HOURS 6
2.6. SESSION TIMEOUT 6
2.7. CHANGING YOUR PASSWORD 6
3. ADMINISTRATION FUNCTIONALITIES 7
3.1. CREATE A NEW USER 7
3.2. EDIT USER DETAILS 7
4. OVERALL SIMULATION WORKFLOW 9
5. ACCOUNT SELECTION 11
6. CREATING SIMULATION PORTFOLIO 12
6.1. OTC PORTFOLIO SCREEN 12
6.1.1. Overall Summary 12
6.1.2. Retrieve Cleared portfolio 12
6.1.3. Export Cleared Portfolio 12
6.1.4. Upload Custom Portfolio 13
6.1.4.1. Download OTC Template 13
6.1.4.2. CSV File Format 14
6.1.4.3. Upload CSV File Containing custom OTC Portfolio 20
6.1.5. Include In simulation 20
6.1.6. Download OTC Simulation Portfolio 20
6.1.7. Reset the OTC Simulation Portfolio 20
6.2. FUTURES PORTFOLIO SCREEN 21
6.2.1. Overall Summary 21
6.2.2. Valid ETD Instrument Codes 21
6.2.3. Retrieve Cleared Portfolio 21
6.2.4. Export Cleared Portfolio 22
6.2.5. Upload Custom Portfolio 23
6.2.5.1. Download Futures Template 23
6.2.5.2. CSV File Format 24
6.2.6. Allocate for Cross-Margining 27
6.2.7. Include in Simulation 27
6.2.8. Download Futures Simulation portfolio 28
6.2.9. Reset Futures Simulation portfolio 28
7. SIMULATION RESULTS SCREEN 29
7.1. SUBMITTING FOR SIMULATION 29
7.2. PROGRESS UPDATE 29
7.3. VIEW SIMULATION RESULTS 29
8. COMMON SIMULATION ERROR MESSAGES 32
9. CONTACTING SUPPORT 33
9.1. ASX ONLINE HELPDESK SUPPORT 33
9.2. ASX SERVICE DESK 33
10. APPENDICES 34
10.1. APPENDIX 1 – REGISTRATION FORM 34
10.2. APPENDIX 2 – DIGITAL CERTIFICATE PROCEDURE 34

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

10.2.1. Pre-requisites for Enrolment of a Digital Certificate *34*
10.2.2. Download and Installation of the Root Digital Certificate *34*
10.2.3. Enrolment, Downloading and Installation Procedure of the user certificate *35*
10.2.4. Exporting / Importing Procedure *38*
10.2.4.1. Exporting a Certificate 38
10.2.4.2. Importing a Certificate 40
10.3. APPENDIX 3 – TROUBLESHOOTING 43
10.3.1. Browser-related Error Messages *43*
10.3.1.1. This website only supports Internet Explorer 7, 8 and 9 Issue 43
10.3.1.2. HTTP 403 Forbidden Issue 43
10.3.1.3. JavaScript Issue 43
10.3.2. Digital Certificate Issues *45*
10.3.2.1. Issues with Enrolment for a Digital ID: 45
10.3.2.2. Issues with Download and Installation of a Digital Certificate 46
10.3.2.3. Issues with Importing and Exporting Digital Certificates 46
10.3.2.4. Digital Download and Installation Issues 46
10.3.2.5. Digital Certificate Could Not Be Installed 46
10.3.2.6. ID Format Unselected 47
10.3.2.7. Using Digital Certificates Issues 48
10.3.2.8. Digital Certificate Revoked 48
10.3.3. Margin Simulator Access Issues *49*
10.3.3.1. Cannot view margin Simulator link on the application Selection Page. 49
10.3.3.2. On Clicking the Margin Simulator link, access denied error is displayed 49

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

1. Introduction

1.1. Purpose of ASX Clear (Futures) Margin Simulator

ASX Clear (Futures) Margin Simulator is a web based system that provides cross-margin simulation capabilities across cleared and custom Over the Counter (OTC) and Exchange Traded interest rate derivative (ETD) portfolios.

1.2. Audience for this Manual

ASX Clear (Futures) Margin Simulator User Manual has been written for ASX Clear (Futures) Clearing Participants. The users of the ASX Clear (Futures) Margin Simulator include:

- Clearing Participant Administrator User
- Clearing Participant Operator User.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

2. Setup and Access

2.1. System Setup

The following are required to access ASX Clear (Futures) Margin Simulator:

- Internet Explorer 7, 8 or 9
- JavaScript enabled browser
- ActiveX Controls set to "Enabled"
- Onsite Microsoft Installer (MSI) package installed for Windows XP Operating System.

2.2. Participant Administrator User Setup

To create a Clearing Participant Administrator User, you should:

1. Ensure you have an active [1]ASX Online profile: Contact ASX Online Help Desk.
2. Complete, scan and email the following form to: participants.online@asx.com.au.
3. Receive Clearing Participant Administration User account confirmation (with credentials if applicable[2]) from the ASX Online Help Desk by email.
4. Enrol and Download Digital Certificate [3]- Digital Certificate Procedures.
5. Confirm login at the following link: https://asxmos.connect.asxonline.com.

2.3. Participant Operator User Setup

To create a Clearing Participant User, you should:

1. Ensure you have an active[4] ASX Online profile: Contact ASX Online Help Desk.
2. Ask your Clearing Participant Administrator to create a Participant User profile and request for an Users Digital Certificate - Administration Functionalities.
3. Receive Participant User credentials if applicable[5] from the ASX Online Help Desk by email.
4. Enrol and Download Digital Certificate - Digital Certificate Procedures.
5. Confirm login at the following link: https://asxmos.connect.asxonline.com.

2.4. Accessing ASX Clear (Futures) Margin Simulator

To access ASX Clear (Futures) Margin Simulator:

1. Open your browser and navigate to https://asxmos.connect.asxonline.com.
2. Enter your ASX Online login details.
3. Select the SSO certificate to proceed.

   If authentication successful, user is presented with an application selection page.
4. Click Margin Simulator to access the ASX Clear (Futures) Margin Simulator.

---

[1] Users must login to ASX Online and change their password to activate their account.
[2] For a newly created ASX Online account only. Existing accounts to use the same login credentials.
[3] Required only if the user does not have a valid SSO certificate already installed for ASX provided secure web applications.
[4] As per foot note 1.
[5] For a newly created ASX Online account only. Existing accounts to use the same login credentials.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Tip:

If the users, setup by the Clearing Participant administrators are unable to access the ASX Clear (Futures) Margin Simulator, they can refer to the Appendix 3: Troubleshooting.

Appendix 3: Troubleshooting highlights three most common areas that can prevent users from accessing ASX Clear (Futures) Margin Simulator:

- Browser Related Issues
- Digital Certificate Issues
- Margin Simulator Access Issues.

2.5. Operating Hours

ASX Clear (Futures) Margin Simulator is available to users from Monday to Friday (excluding Public Holidays), from 7:30 am to 9pm AEST (Sydney) Time.

Note:

Cleared Future positions cannot be retrieved for simulation past 7pm every day. However users can perform Margin Simulation by uploading custom futures portfolio.

2.6. Session Timeout

Session timeout and disconnection occurs after 60 minutes of inactivity. You will be informed of this when attempting to perform a function in ASX Clear (Futures) Margin Simulator and asked to log in again.

Be aware that when your session times out, any unsaved or work in progress information will be lost.

2.7. Changing your Password

Passwords to use the ASX Clear (Futures) service are the same as the password used to access the ASX Online service. If you are given an ASX Online password for the first time, you will need to change that password initially in ASX Online before trying to login to the ASX Clear (Futures) Margin Simulator.

Your password expires every 45 days and you will be prompted by the ASX Clear (Futures) Margin Simulator to create a new password. You will not be able to log on until you have changed your password. All password changes are conducted through ASX Online.

Be aware that the following standards apply to your password:

1. Passwords must contain characters from at least three of the following four classes:
    - English upper case letters, e.g. A-Z
    - English lower case letters, e.g. a-z
    - Numeric values, e.g. 0-9
    - Special characters e.g. $ (dollar sign) or _ (underscore).
2. Passwords may not contain the user name or any part of the user's full name.
3. Passwords must be at least 8 characters long.
4. New passwords must not be the same as the previous password.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

3. Administration Functionalities

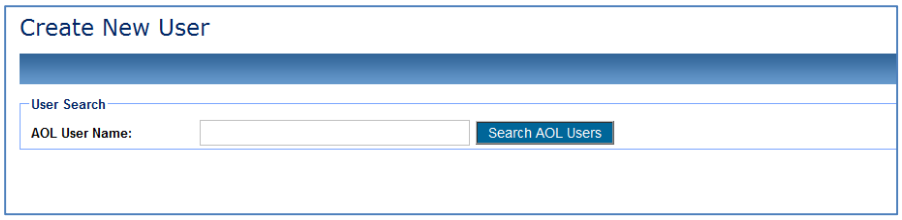
Administrators can perform the following functions for Clearing Participants user accounts:

- Create a new user
- Editing user details.

3.1. Create a new user

1. Click *Create new User* in the navigation panel.

When *Create New User* has been selected, the Create New User screen is displayed.



2. Search for usernames that have already been set up in ASX Online. ASX Online usernames are case sensitive.
    a. If the username is not found then user has to be setup in ASX Online prior to granting them access in ASX Clear (Futures) Margin Simulator.

If a match is found, the following details will be populated:

- ASX Online User Name
- First Name
- Last Name
- Email Address
- Firm Code.

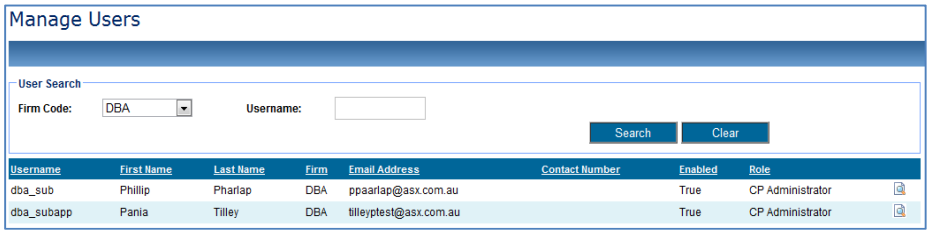
3. Ensure all details are correct and input a relevant Contact Number for the Clearing Participant User.
4. Nominate the user role:
    a. Operator
    b. Administrator.
5. Clearing Participants have the ability to manage their own Users and User privileges. Request a digital certificate on the user's behalf, by checking 'Request Certificate' and click "Create User" to apply changes. This will send a request to ASX Online Help Desk for a VeriSign digital certificate.
6. Click the 'Close' button to end the user creation process.

3.2. Edit User details

To edit user details:

1. Click Manage User in the navigation panel.
2. Once Manage User has been selected, the Manage Users screen is displayed.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014



3. Enter user details in the Firm Code and Username fields, and click Search.
4. The user can also be searched for by entering part of the username in the Username field, and clicking Search.
5. Click the magnifying glass icon for the required user.
6. The following user details can be edited:
    a. Roles – Operator/Administrator
    b. Revoke Certificate – Sends requests to ASX Online Help Desk.
    c. Disable access to ASX Clear (Futures) Margin Simulator.
7. Click the 'Close' button to end the user creation process.

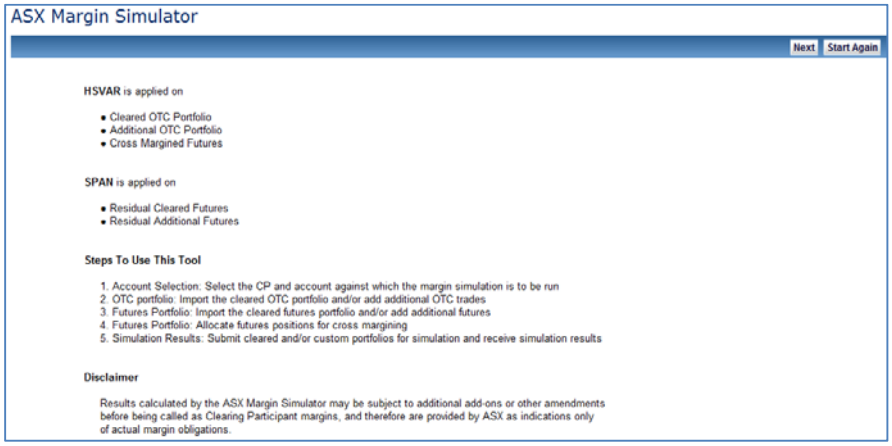
© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

4. Overall Simulation Workflow

On successful login the Clearing Participant user is presented with a welcome landing page. The application is designed like a wizard where the user has to click on Next button to progress through the process. Previous and Start Again buttons are provided to go back to previous step(s) or restart the simulation process.

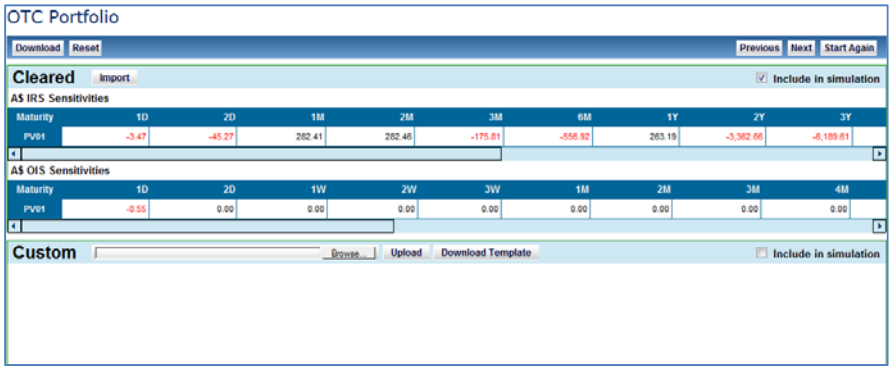
Using ASX Clear (Futures) Margin involves the following steps:

1. Start – Landing Page.


ASX Margin Simulator
Next
Start Again
HSVAR is applied on
• Cleared OTC Portfolio
• Additional OTC Portfolio
• Cross Margined Futures
SPAN is applied on
• Residual Cleared Futures
• Residual Additional Futures
Steps To Use This Tool
1. Account Selection: Select the CP and account against which the margin simulation is to be run
2. OTC portfolio: Import the cleared OTC portfolio and/or add additional OTC trades
3. Futures Portfolio: Import the cleared futures portfolio and/or add additional futures
4. Futures Portfolio: Allocate futures positions for cross margining
5. Simulation Results: Submit cleared and/or custom portfolios for simulation and receive simulation results
Disclaimer
Results calculated by the ASX Margin Simulator may be subject to additional add-ons or other amendments before being called as Clearing Participant margins, and therefore are provided by ASX as indications only of actual margin obligations.

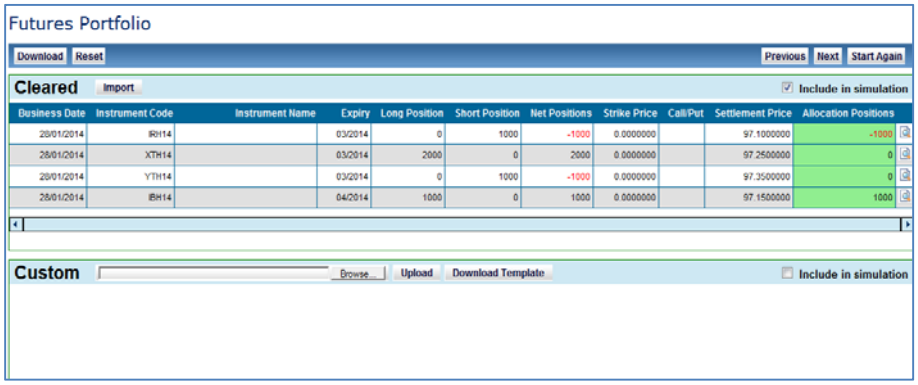
2. Select the account that contains the positions on which simulation will be performed.

3. Create OTC Simulation Portfolio.

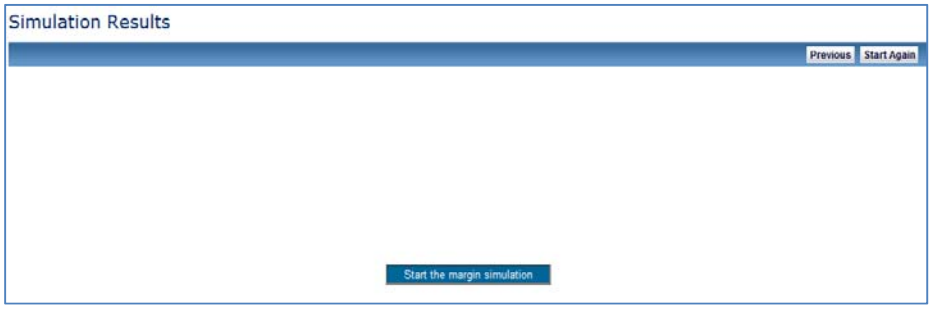


© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

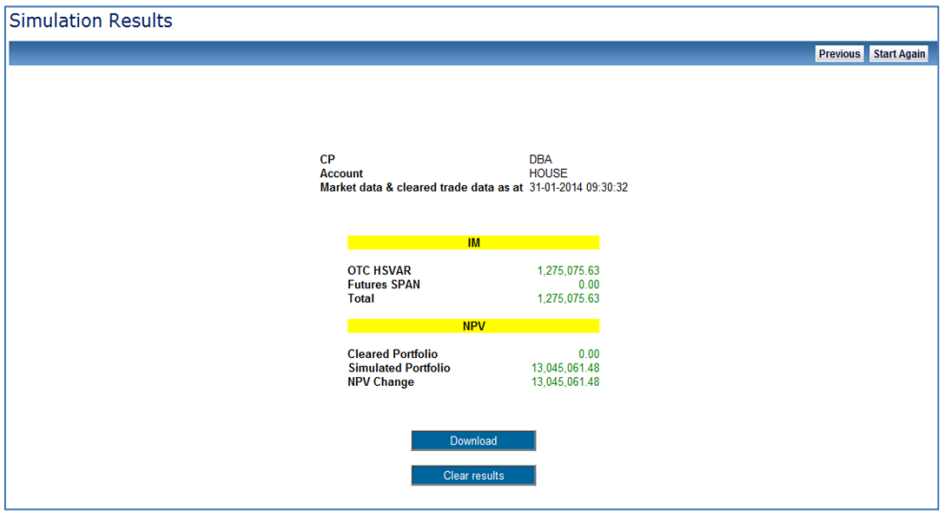
4. Create Futures Simulation portfolio and mark positions for cross margining.



5. Submit for simulation.



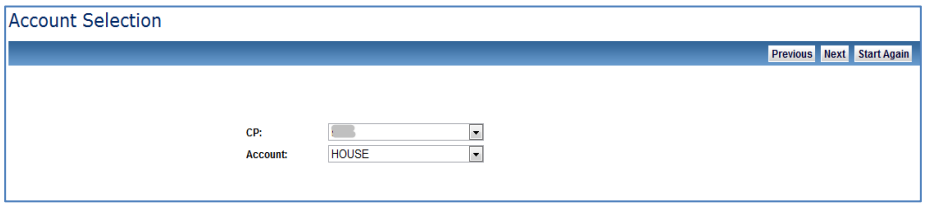
6. View Simulation results.



© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

5. Account Selection

Account selection provides the Clearing Participant users the functionality to select the Account that will be used to retrieve cleared positions to perform simulation on.



Tip:

- Based on the account selected the ASX Clear (Futures) Margin Simulator will allow the user to perform following types of simulations:
  - Cross margin Simulation (for cross margin enabled accounts)
  - OTC Only Simulation (for OTC Only accounts)
  - Futures Only Simulation (for ETD Only accounts).
- If the user wishes to perform cross-margin simulation, but the users firm does not have a cross margin enabled account, please contact your relationship manager at ASX.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

6. Creating Simulation Portfolio

6.1. OTC Portfolio Screen

6.1.1. Overall Summary

OTC Portfolio Screen provides a provision for the end user to create an OTC simulation portfolio.

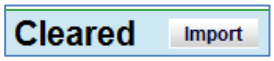
The simulation portfolio can be made up on either or both of the following components:

- Existing OTC cleared portfolio
- Custom OTC trade portfolio.

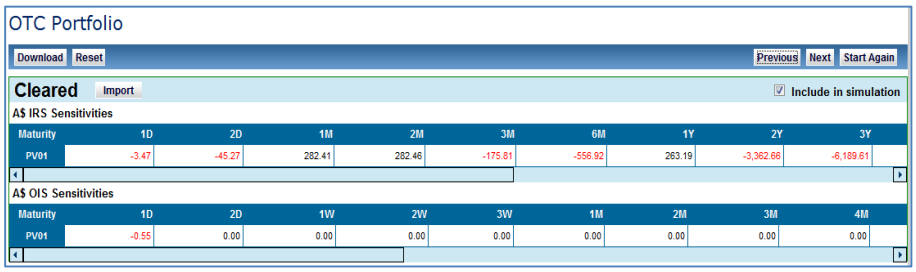
6.1.2. Retrieve Cleared portfolio

To include the existing cleared portfolio in the Margin Simulation it is required for the user to import the cleared OTC portfolio into the ASX Clear (Futures) Margin Simulator.

In order to import cleared portfolio the user has to click the **Import** button on the top- left hand side of the screen.



Clicking the "Import Cleared portfolio" will display the PV01 representation of the cleared OTC portfolio as shown in Figure below:



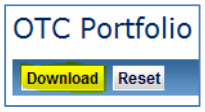
PV01 ladder OTC Cleared Portfolio

Note:

- In case the user does not wish to include the cleared portfolio in the Margin Simulation, one of the solutions is to not import OTC cleared portfolio in the ASX Clear (Futures) Margin Simulator.
- PV01 ladder imported does not include cross margined futures positions.

6.1.3. Export Cleared Portfolio

If the user wishes to view the details of the trades underlying the PV01 representation of the cleared portfolio, the users can export the cleared OTC trades into a ".csv" file format by clicking on the **Download**



On exporting the cleared portfolio the user is presented with an option to save the trade ".csv" file to the desired location.

The file format of the exported cleared portfolio is explained in Upload Custom Portfolio- CSV File Format section.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Tip:

- The exported trade file is the same format to upload custom portfolio for simulation. If users wish to do so, they can manipulate the contents of the file and upload the trades as custom portfolio for simulation.
- Please ensure Include in Simulation checkbox is selected for Cleared portfolio to download the Cleared portfolio in a csv file.

6.1.4. Upload Custom Portfolio

Upload custom portfolio feature enables the user to include custom OTC portfolio positions in the margin simulation run.

The user may choose to run the simulation on a portfolio made up on of custom portfolio only or custom portfolio in combination with the cleared portfolio.

The custom portfolio must only include OTC positions that are eligible to be cleared by ASX. The custom portfolio uploaded is subjected to the trade eligibility checks similar to the production environment. For full details of ASX OTC trade eligibility please refer to the ASX OTC Handbook.

Tip:
If the custom portfolio provided for simulation contains positions that do not pass ASX's trade eligibility checks, the entire simulation portfolio batch is rejected.

6.1.4.1. Download OTC Template

Custom Portfolio is uploaded using a pre-defined CSV file template. This template can be downloaded by clicking on the Download Template link on the bottom half of the screen.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

6.1.4.2. CSV File Format

The CSV file that is used to upload custom OTC portfolio for Simulation contains the following fields and properties:

Field No	Field Name	Required	Data Type	Instruction to populate the CSV field values
1	TradeType	Mandatory	String(10)	Acceptable Values include : 1. CPPAYSFIX- To be used when Clearing participant running the simulation is Paying Fixed Leg of the IRS 2. CPPAYSFLOAT - To be used when Clearing participant running the simulation is Paying Floating leg of the IRS 3. CPPAYSBASIS – To be used when the IRS trade being simulated is a basis SWAP.
2	Notional	Mandatory	Number	Notional Amount of the trade For e.g. : 1000000
3	Currency	Mandatory	String(3)	Currency code of the SWAP. Please note currently only A$ trades are accepted. For example: AUD
4	StartDate	Mandatory	Date dd/mm/yyyy	Start date of the SWAP trade For example: 16/03/2013
5	EndDate	Mandatory	Date dd/mm/yyyy	End date of the SWAP trade For example: 16/03/2015
6	FixedRate	Conditional Mandatory	Number	Interest rate for the fixed leg of the trade in percent (without the percentage % sign) Condition: Only to be filled in for : -CPPAYSFIX -CPPAYSFLOAT Leave Blank for CPPAYSBASIS For example: 2.5
7	Spread	Conditional Mandatory	Number	Spread to be applied on the Index for the floating leg of the trade in percent (without the percentage % sign) Condition: Only to be filled in for :

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Field No	Field Name	Required	Data Type	Instruction to populate the CSV field values
				-CPPAYSFIX -CPPAYSFLOAT Leave Blank for CPPAYSBASIS For example: 0.01
8	RateIndex	Conditional Mandatory	String(13)	Index for the floating leg of the trade The field RateIndex is made up of 3 components separated by the # symbol: • Currency(3 Chars) : for example AUD • Index name : for example BBSW (Max 6 Char) • Tenor for the Index: For example: 3M (2 Char) Condition: Only to be filled in for : -CPPAYSFIX -CPPAYFSLOAT Leave Blank for CPPAYSBASIS For example: • AUD#BBSW#3M, • AUD#BBSW#6M • AUD#AONIA#1D
9	FixLegCoupon Frequency	Conditional Mandatory	String(4)	Frequency when the fix leg of the trade is paid a) Valid Values for IRS(BBSW) i)QTR, ii)PA, iii)SA, d)ZC, b) Valid Values for OIS(AONIA) ii)PA, b)ZC Condition: Only to be filled in for : -CPPAYSFIX -CPPAYSFLOAT Leave Blank for CPPAYSBASIS

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Field No	Field Name	Required	Data Type	Instruction to populate the CSV field values
10	FloatingLegCoupon Frequency	Conditional Mandatory	String(4)	Frequency when the floating leg of the trade is paid a) Valid Values for IRS(BBSW) i)QTR, ii)SA, b) Valid Values for OIS(AONIA) ii)PA, b)ZC Condition: Only to be filled in for : -CPPAYSFIX -CPPAYSFLOAT Leave Blank for CPPAYSBASIS
11	DateRoll	Mandatory	String(10)	Instruction to handle payment, if the payment date falls on a holiday, weekend, and month end. Valid Values are : a)MOD_FOLLOW b)FOLLOWING c)NO_CHANGE d)PRECEDING
12	DayCount	Mandatory	String(8)	Interest calculation basis (dependent on currency of the trade) For A$ trade valid value: ACT_365
13	PeriodRule	Optional	String(8)	Accrual Method Valid Values: ADJUSTED
14	CouponStubRule	Optional	String(16)	Describes how stub periods will be handled for a trade Please note: ASX Clear (Futures) Margin Simulator applies the same Coupon StubRule across both the legs of the trade. Valid Values are: • NONE • SHORT FIRST • LONG FIRST • SHORT LAST

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Field No	Field Name	Required	Data Type	Instruction to populate the CSV field values
15	PayLegRateIndex	Conditional Mandatory	String(13)	CP Pay leg rate index to be used for basis swap The field PayLegRateIndex is made up of 3 components separated by the # symbol: • Currency(3 Chars) : for example AUD • Index name : for example BBSW (Max 6 Char) • Tenor for the Index: For example: 3M (2 Char) Condition: Only to be filled in for : CPPAYSBASIS Leave Blank for -CPPAYSFIX -CPPAYSFLOAT For example: • AUD#BBSW#3M, AUD#BBSW#6M
16	PayLegSpread	Conditional Mandatory	Number	Spread to be applied on the Index when the CP is Paying floating leg of the basis swap in percent (without the percentage % sign) Condition: Only to be filled in for : CPPAYSBASIS Leave Blank for -CPPAYSFIX -CPPAYSFLOAT For example: 0.01
17	PayLegCouponFrequency	Conditional Mandatory	String(4)	Payment frequency when the CP is Paying floating leg of the basis swap Valid Values i)QTR,ii)SA

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Field No	Field Name	Required	Data Type	Instruction to populate the CSV field values
				Condition: Only to be filled in for : CPPAYSBASIS Leave Blank for -CPPAYSFIX -CPPAYSFLOAT
18	ReceiveLegRateIndex	Conditional Mandatory	String(13)	CP Receive leg rate index to be used for basis swap in percent The field ReceiveLegRateIndex is made up of 3 components separated by the # symbol: • Currency(3 Chars) : for example AUD • Index name : for example BBSW (Max 6 Char) • Tenor for the Index: For example: 3M (2 Char). Condition: Only to be filled in for : CPPAYSBASIS Leave Blank for -CPPAYSFIX -CPPAYSFLOAT For example: • AUD#BBSW#3M, • AUD#BBSW#6M.
19	ReceiveLegSpread	Conditional Mandatory	Number	Spread to be applied on the Index when the CP is Receiving floating leg of the basis swap in percent (without the percentage % sign) Condition: Only to be filled in for : CPPAYSBASIS Leave Blank for

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Field No	Field Name	Required	Data Type	Instruction to populate the CSV field values
				-CPPAYSFIX -CPPAYSFLOAT For example: 0.01
20	ReceiveLegCoupon Frequency	Conditional Mandatory	String(4)	Payment frequency when the CP is Receiving floating leg of the basis swap Valid Values i)QTR,ii)SA Condition: Only to be filled in for : CPPAYSBASIS Leave Blank for -CPPAYSFIX -CPPAYSFLOAT
21	TradeIdentifier	Optional	Number	• Contains the ASX trade Identifier for the cleared trades. • Should be left blank for Custom portfolio being uploaded.

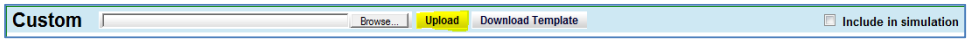
TradeType	Notional	Currency	StartDate	EndDate	FixedRate	Spread	RateIndex	FixLegCouponFrequency	FloatingLegCouponFrequency	DateRoll	DayCount	PeriodRule	CouponStubRule	PayLegRateIndex	PayLegSpread	PayLegCouponFrequency	ReceiveLegRateIndex	ReceiveLegSpread	ReceiveLegCouponFrequency	TradeIdentifier
CPPAYSFIXED	5000000	AUD	17/12/2013	17/12/2014	5	0	AUD#BBSW#3M	QTR	QTR	MOD_FOLLOW	ACT/365	ADJUSTED	NONE							32051
CPPAYSFLOAT	5000000	AUD	18/12/2013	19/12/2014	5	0	AUD#BBSW#3M	QTR	QTR	MOD_FOLLOW	ACT/365	ADJUSTED	SHORTFIRST							
CPPAYSFIXED	5000000	AUD	18/12/2013	18/12/2014	5	0	AUD#AONIA#1D	PA	PA	MOD_FOLLOW	ACT/365	ADJUSTED	NONE							
CPPAYSFLOAT	6000000	AUD	18/12/2013	18/12/2014	6	0	AUD#AONIA#1D	PA	PA	MOD_FOLLOW	ACT/365	ADJUSTED	NONE							32140
CPPAYSBASIS	5000000	AUD	18/12/2013	18/12/2014						MOD_FOLLOW	ACT/365	ADJUSTED	NONE	AUD#BBSW#3M	0.01	QTR	AUD#BBSW#3M	0	QTR	32145
CPPAYSBASIS	5000000	AUD	18/12/2013	18/12/2015						MOD_FOLLOW	ACT/365	ADJUSTED	NONE	AUD#BBSW#6M	0.05	SA	AUD#BBSW#3M	0	QTR	
CPPAYSBASIS	5000000	AUD	18/12/2013	18/12/2038						MOD_FOLLOW	ACT/365	ADJUSTED	NONE	AUD#BBSW#6M	0.25	SA	AUD#BBSW#6M	0	SA	
CPPAYSBASIS	5000000	AUD	18/12/2013	19/12/2014						MOD_FOLLOW	ACT/365	ADJUSTED	SHORTLAST	AUD#BBSW#6M	0	SA	AUD#BBSW#3M	0	QTR	

Sample OTC Trade File

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

6.1.4.3. Upload CSV File Containing custom OTC Portfolio

The CSV file containing the custom OTC portfolio is uploaded from the user's PC by browsing to the CSV file location and clicking upload.

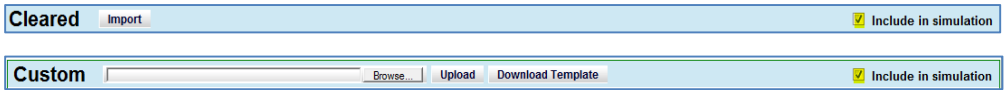


6.1.5. Include In simulation

The simulation portfolio is defined as the combination of cleared and custom portfolio that will be submitted to ASX Clear (Futures) Margin Simulator to calculate the margin requirements.

The ASX Clear (Futures) Margin Simulator provides the flexibility to include either or both of custom and cleared OTC portfolios in the simulation run.

The OTC portfolio screen provides an Include in simulation toggle (checkbox) against the cleared and custom portfolio sections to include the desired portfolio in the simulation run.

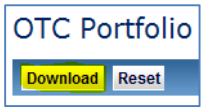


Tip:

Include in simulation □ toggle (checkbox) also controls the functionality of Download OTC simulation Portfolio. Portfolio section(s) selected to be included in simulation will be downloaded or reset when such a request is made.

6.1.6. Download OTC Simulation Portfolio

To export the trades included in the Simulation portfolio, user can click Download at the top-left corner of the screen.

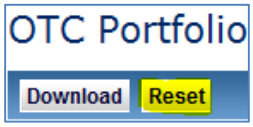


Tip:

- The downloaded OTC simulation portfolio contains the trades in section (cleared or custom) that has Include in Simulation checked.
- The CSV file containing the downloaded simulation portfolio is in the same format used to upload custom OTC portfolio for simulation.

6.1.7. Reset the OTC Simulation Portfolio

To reset the OTC simulation portfolio, user can click on Reset OTC Simulation Portfolio button at the top-left corner of the screen.



Clicking the reset button will remove the trades that have been included in the OTC simulation portfolio.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

6.2. Futures Portfolio Screen

6.2.1. Overall Summary

Futures Portfolio Screen provides a provision for the end user to create a Futures simulation portfolio.

The simulation portfolio can be made up of either or both of the following components:

- Existing Futures cleared portfolio
- Custom Futures portfolio.

6.2.2. Valid ETD Instrument Codes

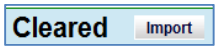
Following table lists the instrument codes that are allowed in the futures portfolio screen:

Instrument Code	Instrument Name	Eligible for Cross-margining
IB	ASX 30 Day Interbank Cash Rate Futures	Yes
IB	ASX 30 Day Interbank Cash Rate Options	No
IR	ASX 90 Day Bank Accepted Bill Futures	Yes
IR	ASX 90 Day Bank Accepted Bill Options	No
OI	ASX 3 Month Overnight Index Swap Futures	No
YT	ASX 3 Year Treasury Bond Futures	Yes
YT	ASX 3 Year Treasury Bond Options	No
YD	ASX 3 Year Treasury Bond Intra-day Options	No
YO	ASX 3 Year Treasury Bond Overnight Options	No
XT	ASX 10 Year Treasury Bond Futures	Yes
XT	ASX 10 Year Treasury Bond Options	No
XD	ASX 10 Year Treasury Bond Intra-day Options	No
XO	ASX 10 Year Treasury Bond Overnight Options	No
XS	ASX 10 Year Interest Rate Swap Futures	No
YS	ASX 3 Year Interest Rate Swap Futures	No

6.2.3. Retrieve Cleared Portfolio

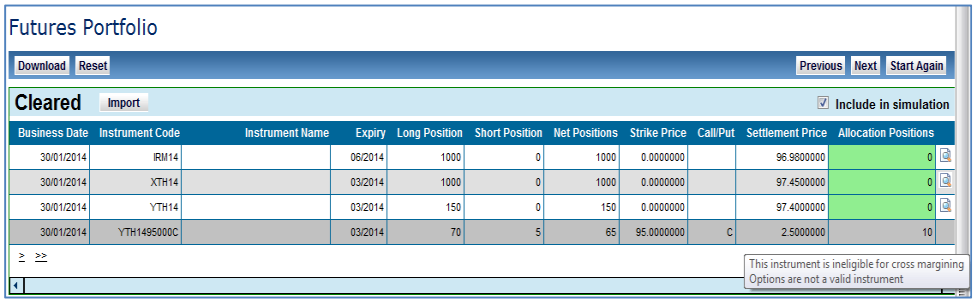
Existing cleared future portfolio can be used in ASX Clear (Futures) Margin Simulator by importing the cleared futures portfolio.

In order to import cleared portfolio the user has to simply click on the click on **Import** button on the top- left hand side of the screen.



On clicking the “Import Cleared portfolio” the user must see the cleared futures/ETD portfolio as shown in Figure below:

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014



Note:

- The imported futures portfolio contains any cleared positions that belong to the Valid ETD Instrument set. .
- The Valid ETD instrument set also contains :
  - Interest rate options positions
  - Interest rate future positions that are not enabled for cross-margining.
- Such positions can contribute to margin offsets but such positions cannot be cross-margined.
- Positions that are or have become ineligible should have no allocated positions. If there are any allocations for ineligible positions then these allocation must be removed in the source clearing system.
- The imported positions having *Allocation Positions* field disabled (greyed out) signify that these positions are ineligible for cross margining. This can be for one of the following reasons:
  - Contract is not eligible for cross margining (for example: an Options contract or a Futures Contract not enabled for cross-margining).
  - Contract is eligible but position does not satisfy the eligibility criteria for cross margining (for example: an ASX 30 Day Interbank Cash Rate Futures contract expiring in next 3 days).

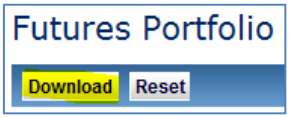
ASX Clear (Futures) Margin Simulator uses previous End of Day settlement prices to calculate Initial Margin (IM); as a result any new instrument codes created today will not have the prices available for IM calculations. Therefore these positions are not included in simulation. Any simulation to include these instrument codes will have to be performed the next day.

Tip:

In case the user does not wish to include the cleared portfolio in the margin simulation, one of the solutions is to simply not import futures cleared portfolio in the ASX Clear (Futures) Margin Simulator.

6.2.4. Export Cleared Portfolio

User can export the cleared Futures into a ".csv" file format by clicking on the **Download** button



On exporting the cleared portfolio the user is presented with an option to save the trade ".csv" file to the desired location.

The file format of the exported cleared portfolio is explained in Upload Custom Portfolio- CSV File Format section.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Tip:

- The exported position file is in the same format used to upload custom portfolio for simulation. If users wish to do so, they can manipulate the contents of the exported file and upload the positions as custom portfolio for simulation.
- Ensure Include in Simulation checkbox is selected for Cleared portfolio to download the Cleared portfolio in a csv file.

6.2.5. Upload Custom Portfolio

Upload custom portfolio feature enables the user to include custom futures portfolio positions in the margin simulation run.

The user may choose to run the simulation on a portfolio made up on of custom portfolio only or custom portfolio in combination with the cleared portfolio.

The custom portfolio must only include valid ETD instruments positions only .The custom portfolio uploaded is subjected to the eligibility checks for valid product types.

Note

- A user may upload valid Interest rate options positions and Interest rate future positions not enabled for cross-margining; as such positions can contribute to margin offsets; however these positions cannot be cross-margined.
- The uploaded custom positions having *Allocation Positions* field disabled (greyed out) signify that these positions are ineligible for cross margining. This can be for one of the following reasons:
  - Contract is not eligible for cross margining (for example: an Options contract OR a Futures Contract not enabled for cross-margining).
  - Contract is eligible but position does not satisfy the eligibility criteria for cross margining (for example: an ASX 30 Day Interbank Cash Rate Futures contract expiring in next 3 days).

  Allocations for these positions must be removed in the CSV file and uploaded again.

6.2.5.1. Download Futures Template

Custom Portfolio is uploaded using a pre-defined CSV file template. This template can be downloaded by clicking on the Download Template link on the bottom half of the screen.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

6.2.5.2. CSV File Format

The CSV file that is used to upload custom futures portfolio for Simulation contains the following fields:

<table>
<tr><th>Table Header</th><th>Table Header</th><th>Table Header</th><th>Data Type</th><th>Instruction to populate the field values</th></tr>
<tr><td>1</td><td>BusinessDate</td><td>Mandatory</td><td>Date
dd/mm/yyyy</td><td>The date the position was held. For custom portfolio it will be todays date.
For ex : 01/12/2013</td></tr>
<tr><td>2</td><td>InstrumentCode</td><td>Mandatory</td><td>String(10)</td><td>Unique ASX identifier for an instrument.
For example:
(i) IRH14
(ii) IRH1494500P

Naming convention Future instrument code:
<table>
<tr><th>Component</th><th>Field Size</th><th>Sample</th></tr>
<tr><td>Instrument Code</td><td>2</td><td>IR</td></tr>
<tr><td>Expiry Month Code</td><td>1</td><td>H</td></tr>
<tr><td>Expiry Year</td><td>2</td><td>14</td></tr>
</table>
Naming convention Option instrument code:
<table>
<tr><th>Component</th><th>Field Size</th><th>Sample</th></tr>
<tr><td>Instrument Code</td><td>2</td><td>IR</td></tr>
<tr><td>Expiry Month Code</td><td>1</td><td>H</td></tr>
<tr><td>Expiry Year</td><td>2</td><td>14</td></tr>
<tr><td>Strike price</td><td>5</td><td>94500</td></tr>
<tr><td>Call or Put</td><td>1</td><td>P</td></tr>
</table></td></tr>
<tr><td>3</td><td>InstrumentName</td><td>Optional</td><td>String(40)</td><td>Type of Instrument</td></tr>
</table>

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Table Header	Table Header	Table Header	Data Type	Instruction to populate the field values
				Please refer to Valid ETD instruments
4	Expiry	Optional	Date mm/yyyy	Expiry Month of the contract For example: 03/2013
5	LongPosition	Mandatory	Number	Long position of the contract For example: 100
6	ShortPosition	Mandatory	Number	Short position of the contract For example: 120
7	NetPositions	Mandatory	Number	Long Position – Short Position For Example: - 60
8	StrikePrice	Optional	Number	The strike price for the option Condition: To be entered only for an Option Position For example: 97.375
9	Call/Put	Optional	Character	Call or Put options Valid values: P , C For example : C Condition: To be entered only for an Option Position
10	SettlementPrice	Optional	Number	The settlement price for the contract. Please note: The Current version of ASX Clear (Future) Margin Simulator does not allow the user to upload the settlement price for Simulation Purpose. Upon custom portfolio upload all settlement prices are replaced by previous day EOD prices. For example: 96.300 (for futures) , 0.060 (for options)
11	AllocatedPositions	Optional	Number	The positions for eligible contracts required to be cross-margined. The allocated positions must be less than or equal to the net positions for the contract. For example: • 30 (for net long positions)

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Table Header	Table Header	Table Header	Data Type	Instruction to populate the field values
				-20 (for net short positions)

BusinessDate	InstrumentCode	InstrumentName	Expiry	LongPositi	ShortPosit	NetPositio	StrikePrice	CallPut	Settlement	AllocatedPositions
31/01/2014	IBF14	ASX 30 Day Interbank Cash Rate Futures	Feb-14	0	1500	-1500	0		97.62	-1000
31/01/2014	IRH14	ASX 90 Day Bank Accepted Bill Futures	Mar-14	0	1000	-1000	0		97.1	-1000
31/01/2014	IRH14	ASX 90 Day Bank Accepted Bill Futures	Mar-14	200	100	100	0		97.1	0
31/01/2014	IRZ14	ASX 90 Day Bank Accepted Bill Futures	Dec-14	1000	1000	0	0		96.2	0
31/01/2014	IRZ16	ASX 90 Day Bank Accepted Bill Futures	Dec-16	500	0	500	0		95.18	500
31/01/2014	IRM15	ASX 90 Day Bank Accepted Bill Futures	Jun-15	2000	2000	0	0		95.85	0
31/01/2014	XTH1494400C	ASX 10 Year Treasury Bond Options	Mar-14	0	500	-500	94	C	3.465	0
31/01/2014	XTH1495800C	ASX 10 Year Treasury Bond Options	Mar-14	55	0	55	94	C	1.73	0
31/01/2014	XTH1496000C	ASX 10 Year Treasury Bond Options	Mar-14	0	1000	-1000	94	C	1.5	0
31/01/2014	XTH1496500C	ASX 10 Year Treasury Bond Options	Mar-14	0	65	-65	94	C	0.94	0

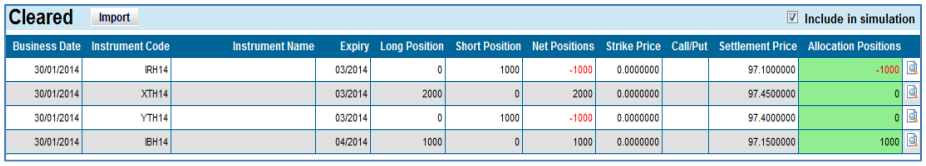
Sample ETD Trade File

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

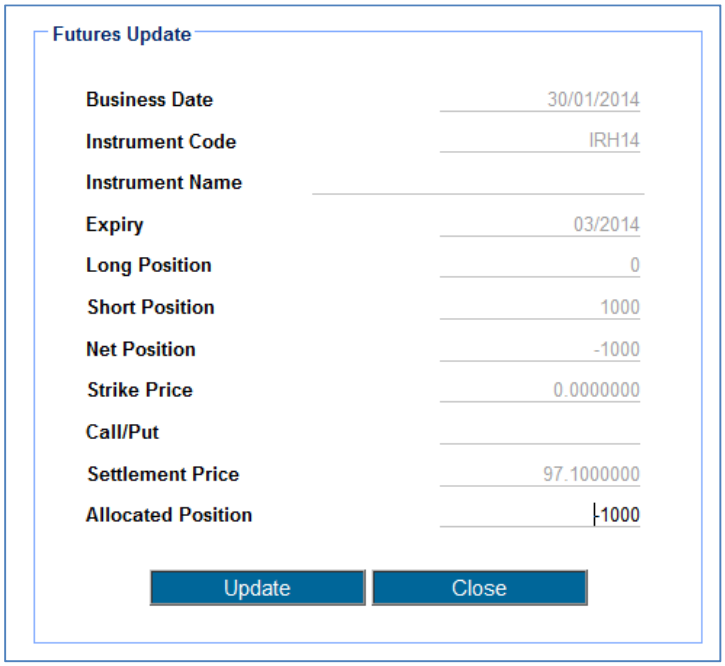
6.2.6. Allocate for Cross-Margining

In order to nominate eligible contract positions for cross-margining the user can use one or both of the following methods:

- Via File upload for custom portfolio: User can provide the positions allocated for cross margining in the custom portfolio upload.
- Via Screen field for custom and cleared portfolio: User is presented with the Allocated position editable field for eligible contracts. Users may change the value of this field to add, edit or remove nominations for cross margining by clicking on the icon.



Business Date	Instrument Code	Instrument Name	Expiry	Long Position	Short Position	Net Positions	Strike Price	Call/Put	Settlement Price	Allocation Positions
30/01/2014	IRH14		03/2014	0	1000	-1000	0.0000000		97.1000000	-1000
30/01/2014	XTH14		03/2014	2000	0	2000	0.0000000		97.4500000	0
30/01/2014	YTH14		03/2014	0	1000	-1000	0.0000000		97.4000000	0
30/01/2014	IBH14		04/2014	1000	0	1000	0.0000000		97.1500000	1000



Editable field to nominate positions for cross margining

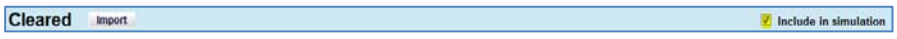
Note

If the account selected for simulation is not Cross-Margin enabled then the *Allocated Positions* field will be disabled. To try out Cross-Margin simulation please contact your ASX Relationship Manager for a demo account.

6.2.7. Include in Simulation

The *simulation portfolio* is defined as the combination of cleared and custom portfolio that will be submitted to margin simulator engine to calculate the margin requirements.

The ASX Clear (Futures) Margin Simulator provides the flexibility to include either or both of custom and cleared futures portfolios in the simulation run. The futures portfolio screen provides an Include in simulation toggle (checkbox) against the cleared and custom portfolio sections to include the associated portfolio in the simulation run.



© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Note

Include in simulation □ toggle (checkbox) also controls the functionality of Download Futures simulation Portfolio. Portfolio section(s) selected to be included in simulation will be downloaded when such a request is made.

6.2.8. Download Futures Simulation portfolio

To export the trades included in the Simulation portfolio, the user can click on the Download button at the top-left corner of the screen

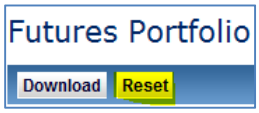
On clicking the Download, a CSV file gets saved on the user's PC at the chosen location.

Tip

- The downloaded Futures simulation portfolio contains the positions in section (cleared or custom) that has **Include in Simulation** checked √.
- The CSV file containing the downloaded simulation portfolio is in the same format used to upload custom Futures portfolio for simulation.

6.2.9. Reset Futures Simulation portfolio

To reset the OTC simulation portfolio, user can click on Reset OTC Simulation Portfolio button at the top-left corner of the screen.



Clicking the reset button will remove the trades that have been included in the Futures simulation portfolio.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

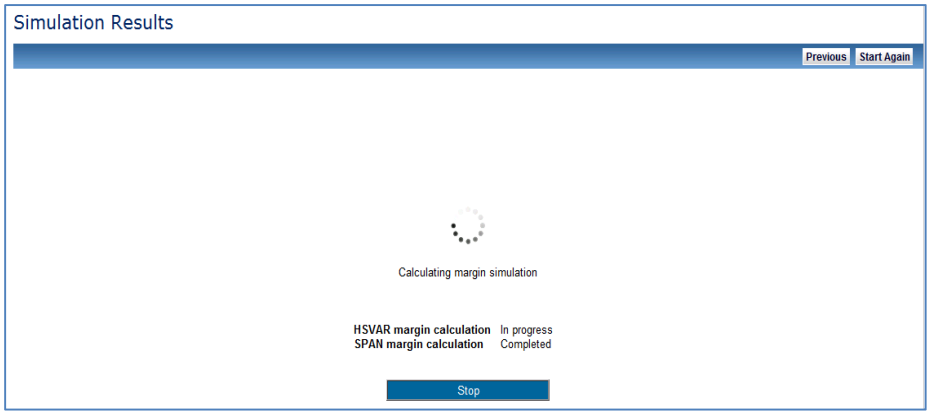
7. Simulation Results Screen

7.1. Submitting for simulation

Once the user has prepared the simulation portfolio they can submit a request for Simulation by clicking on the Start the margin simulation button on the centre of the screen.

7.2. Progress Update

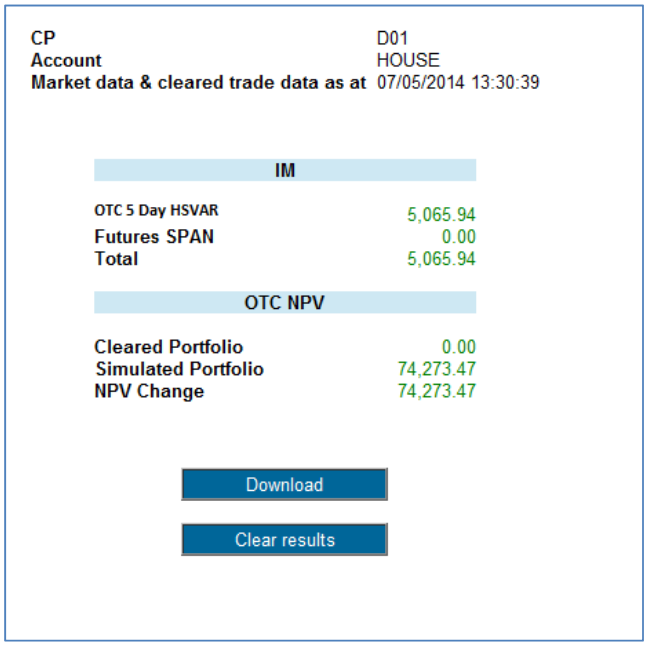
Simulation progress for various components of the results such as HVaR and SPAN (where applicable) is indicated on the screen when the simulation request is submitted.



7.3. View Simulation results

The simulation results screen shows the Initial Margin and the Net Present Value (where applicable) of the simulation portfolio. The results clearly indicate the HsVAR and SPAN (where applicable) components of the Initial Margin Calculated.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014



Results explained:

Initial Margin	
OTC 5Day HSVAR	5Day HSVaR results for OTC portfolio and cross margined future positions(if any) Based on the account chosen for simulation 7 Day VAR may be applicable for client accounts. 7 Day VaR can be derived from 5 Day VaR using the following calculation: 7 Day VaR = 5 Day VaR x √(7/5)
Futures SPAN	IM results for ETD Portfolio (including non-cross-margined future positions and options)
Total	OTC HSVAR (with appropriate holding period) + Futures SPAN

NPV (Net Present Value)	
Cleared Portfolio	NPV for Cleared OTC portfolio (only) at the time of running the simulation. This result does not include any cross-margined future positions).
Simulated Portfolio	NPV for OTC portfolio submitted for simulation run. Represents all OTC positions (custom and/or cleared) submitted for simulation
NPV Change	Simulated Portfolio – Cleared Portfolio

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Notes:

- An imported cleared portfolio includes any trades already cleared / de-cleared at the start of the day, or cleared / de-cleared on the day of the simulation;
- The underlying curve used in any of the calculations is fixed at 6am on the day of simulation;
- To assist in any associated ASX queries, the user is encouraged to do the following :
  - Download the OTC portfolio used in the simulation
  - Keep a copy of any custom OTC trades uploaded for simulation
  - Download the futures portfolio used in the simulation.
  - Keep a copy of any custom futures trades uploaded for simulation
  - Record the date and time of the simulation
- If the results fields display zero as a result, it may imply that the result component is not relevant to the simulation run. For example if the IM-Futures SPAN is 0.00 , this is because the simulation portfolio submitted was made up of only OTC positions and all future positions we 100%(completely) cross-margined.
- To find out the benefit of cross-margining :
  - Run the simulation without allocating any positions for cross margining
  - Recording the results
  - Run the simulation again with positions allocated for cross-margining
  - Compare the results with previously recorded results.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

8. Common simulation error messages

Error Message	Reason
<Field> is missing in row <x>	<Field> is a mandatory field while uploading the custom OTC or future portfolio
<Field> is not a <Date, number> in row <x>	The value of the <field> is not in correct format
Selected account not enabled for <OTC / Exchange traded> Derivatives clearing	The user is trying to perform simulation using OTC portfolio or ETD portfolio when there account is not enabled for a particular product type. You can request your ASX relationship manager for a demo account to try out cross-margin simulation.
No cleared futures/trades were retrieved	There are currently no cleared future positions or OTC trades in the account selected for simulation
Valid range for Allocated Position is from < 0 to netPosition> or < -netPositions to 0>	User is trying to allocate positions for cross-margining more than the net position available for an Instrument.
Valid range for Allocated Position is from <0 to netPosition> or < -netPositions to 0>	User is trying to allocate positions for cross-margining more than the net position available for an Instrument
Exchange Criteria Failed:<Error Description>	The custom OTC portfolio uploaded for simulation contains trade(s) that does not satisfy ASX's trade eligibility criteria.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

9. Contacting Support

9.1. ASX Online Helpdesk Support

Phone: 1800 682 484

Email: participants.online@asx.com.au

9.2. ASX Service Desk

Email: service.desk@asx.com.au

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

10. Appendices

10.1. Appendix 1 – Registration Form

Registration Form for ASX Clear (Futures) Margin Simulation administrator user.

Margin Simulator
Admin Registration Fc

10.2. Appendix 2 – Digital Certificate Procedure

To obtain a digital certificate, your Participant Administrator user must first create the user in ASX Clear (Futures) Margin Simulator as outlined above.

After the ASX Online Help Desk has pre-registered the certificate, you will receive an email with details on how to enrol. The email will be sent to the email address that has been registered in ASX Online.

Before enrolling and downloading a digital certificate please ensure the following checklist has been followed:

10.2.1. Pre-requisites for Enrolment of a Digital Certificate

- ActiveX Controls set to "Enabled"
- Onsite MSI package installed for Windows XP Operating System.

10.2.2. Download and Installation of the Root Digital Certificate

- Click "Install CA" from the Digital Id Centre site[6] to install the CA.
- Ensure above-mentioned CA has been installed to "Trusted Root Certification Authorities".
- During installation, select the format 'My ID for Microsoft Internet Explorer…'
- Download can only occur once, so the user should not delete their digital certificate.

[6] Detailed Instructions and URL to install the root CA is provided in the confirmation email.

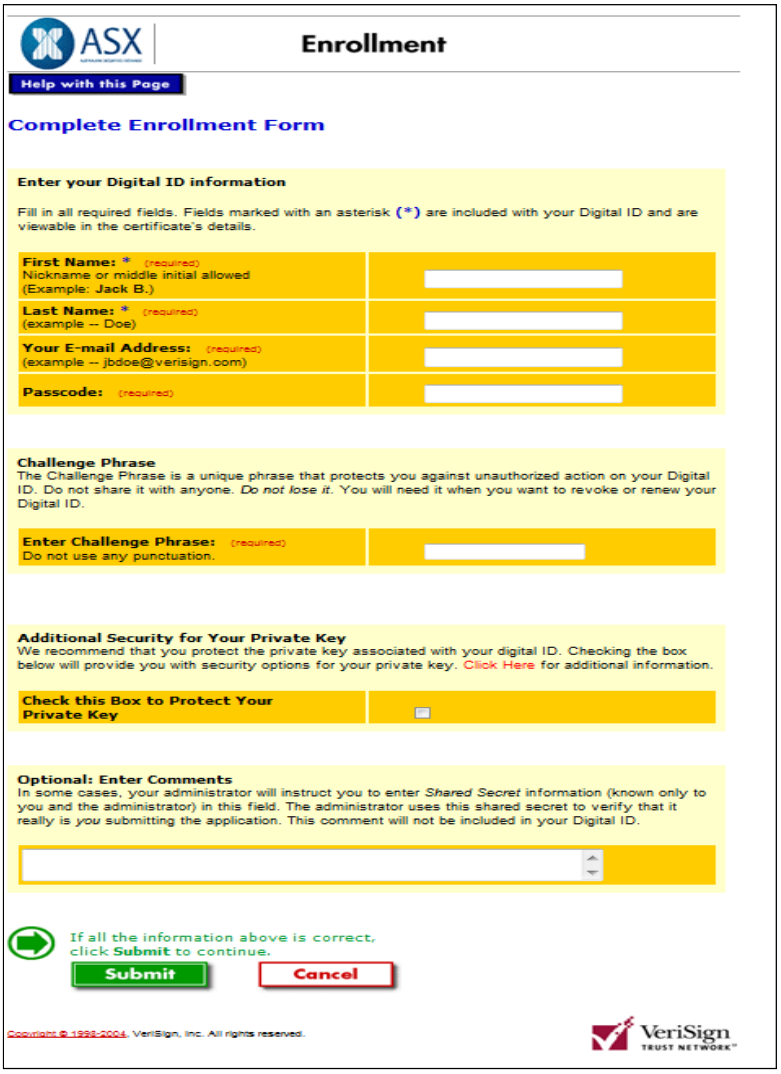
© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

10.2.3. Enrolment, Downloading and Installation Procedure of the user certificate

The enrolment form is accessed through the Digital ID Centre secure website hosted by VeriSign. The enrolment website is accessed via: https://pki.verisign.com.au/services/ASXOperationsPtyLtd/client/userEnrollMS.htm.

2. When loading the enrolment page for the first time, you will see a Security Warning dialog for a program digitally signed by Microsoft. This program is required to enrol for a certificate. It is safe to run it on your computer and its authenticity is proved by a digital signature. Click Yes.

3. The following screen is displayed:


ASX
Enrollment
Help with this Page
Complete Enrollment Form
Enter your Digital ID information
Fill in all required fields. Fields marked with an asterisk (*) are included with your Digital ID and are viewable in the certificate's details.
First Name: * (required)
Nickname or middle initial allowed
(Example: Jack B.)
Last Name: * (required)
(example -- Doe)
Your E-mail Address: (required)
(example -- jbdoe@verisign.com)
Passcode: (required)
Challenge Phrase
The Challenge Phrase is a unique phrase that protects you against unauthorized action on your Digital ID. Do not share it with anyone. Do not lose it. You will need it when you want to revoke or renew your Digital ID.
Enter Challenge Phrase: (required)
Do not use any punctuation.
Additional Security for Your Private Key
We recommend that you protect the private key associated with your digital ID. Checking the box below will provide you with security options for your private key. Click Here for additional information.
Check this Box to Protect Your Private Key
Optional: Enter Comments
In some cases, your administrator will instruct you to enter Shared Secret information (known only to you and the administrator) in this field. The administrator uses this shared secret to verify that it really is you submitting the application. This comment will not be included in your Digital ID.
If all the information above is correct, click Submit to continue.
Submit
Cancel
Copyright © 1996-2004, VeriSign, Inc. All rights reserved.
VeriSign
TRUST NETWORK

4. The following fields must be entered exactly as advised by ASX Online Help Desk:
   - First Name
   - Last Name
   - E-mail Address
   - Passcode[7].

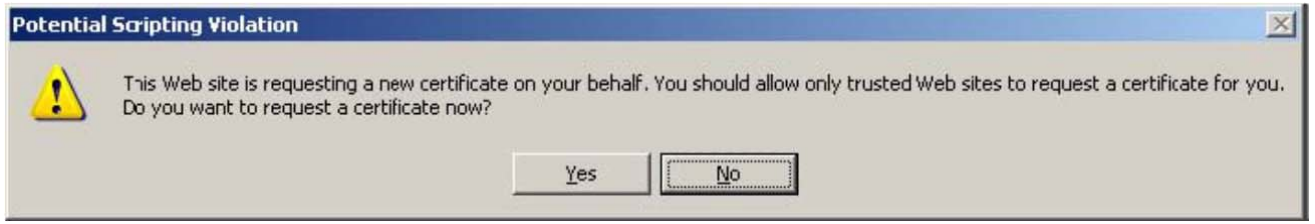
[7] Provided with the confirmation email

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

5. The only field not case sensitive is the Passcode. The Challenge Phrase is a unique phrase set by the user and not shared with anyone. It might only be needed if a non-Internet Explorer browser is used for downloading the digital certificate or during certificate renewal.
6. You will be requested to specify the level of security for your Private Key. It is recommended that High protection is selected for better private key protection.
7. This popup window appears for confirmation of your e-mail address.

Microsoft Internet Explorer
Confirm your e-mail address:
jsmith@participant.com
If your e-mail address is correct click OK, if not click CANCEL and correct it in the enrollment form.
If the e-mail address is not correct you will not be able to use your Digital ID
OK
Cancel

8. If the address is correct, click on OK. The warning window "Web Access Confirmation" appears.


Potential Scripting Violation
This Web site is requesting a new certificate on your behalf. You should allow only trusted Web sites to request a certificate for you.
Do you want to request a certificate now?
Yes
No

9. If you have confirmed that the web site is authentic, click on "Yes" to request the certificate. The following warning window appears:

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Potential Scripting Violation
This Web site is adding one or more certificates to this computer. Allowing an untrusted Web site to update your certificates is a security risk. The Web site could install certificates you do not trust, which could allow programs that you co not trust to run on this computer and gain access to your data.
Do you want this program to add the certificates now? Click Yes if you trust this Web site. Otherwise, click No.
Yes
No

10. Click on "Yes" to add the certificate to your computer.

11. After the certificate is successfully installed you should receive a confirmation page

To confirm that the certificate has been successfully installed, open the Internet Explorer browser and click on: \Tools\Internet Options…\Content\Certificates… and check that the expiration date is one year in the future. ASX has configured the following policy relating to the Passcode expiry period and the lockout threshold for invalid entries: The Passcode expiration for enrolment is set to one month from the date of issue. The lockout threshold is set to three attempts. The fourth invalid entry will lockout the registration record and will require the ASX to reset the Passcode for the user.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

10.2.4. Exporting / Importing Procedure

As a digital certificate can only be downloaded from the VeriSign website once, this manual outlines the steps to export a digital certificate from one PC to another.

This will be required for Business Continuity Processing/Disaster Recovery (BCP/DR) sites where a certificate will need to be installed on the BCP/DR PC in addition to the normal production PC.

Before importing or exporting a digital certificate please ensure the following checklist has been followed:

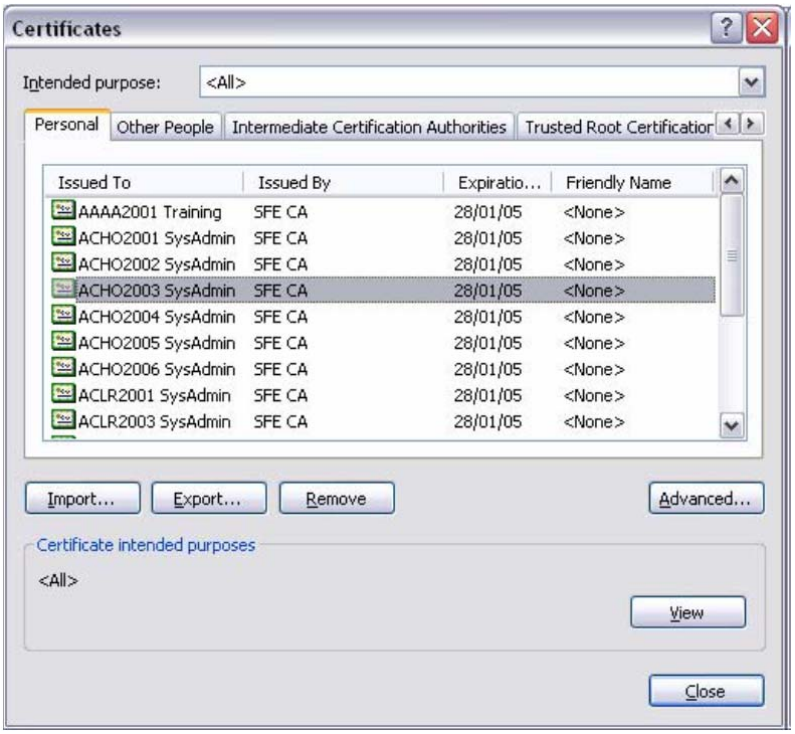
- Private keys must be included in any import or export (i.e. ensure .pfx format is imported/exported, not .cer).
- PKCS#12 format must be used (it is specifically designed for private keys).

10.2.4.1. Exporting a Certificate

1. In Internet Explorer click on Tools, then Internet Options. Select the Content tab and then click in the Certificates button.

2. In the “Certificates” window select the certificate that you wish to export then click ‘Export’.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014



3. The Certificate Export Wizard window then appears. Ensure that you have checked "Yes, export the private key" then click 'Next' to begin the Export.

Certificate Export Wizard
Export Private Key
You can choose to export the private key with the certificate.
Private keys are password protected. If you want to export the private key with the certificate, you must type a password on a later page.
Do you want to export the private key with the certificate?
Yes, export the private key
No, do not export the private key
< Back
Next >
Cancel

4. It is recommended that you Enable strong protection then click 'Next'.

5. You are required to setup a password to protect the private key. This password will be required in order to import the certificate.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

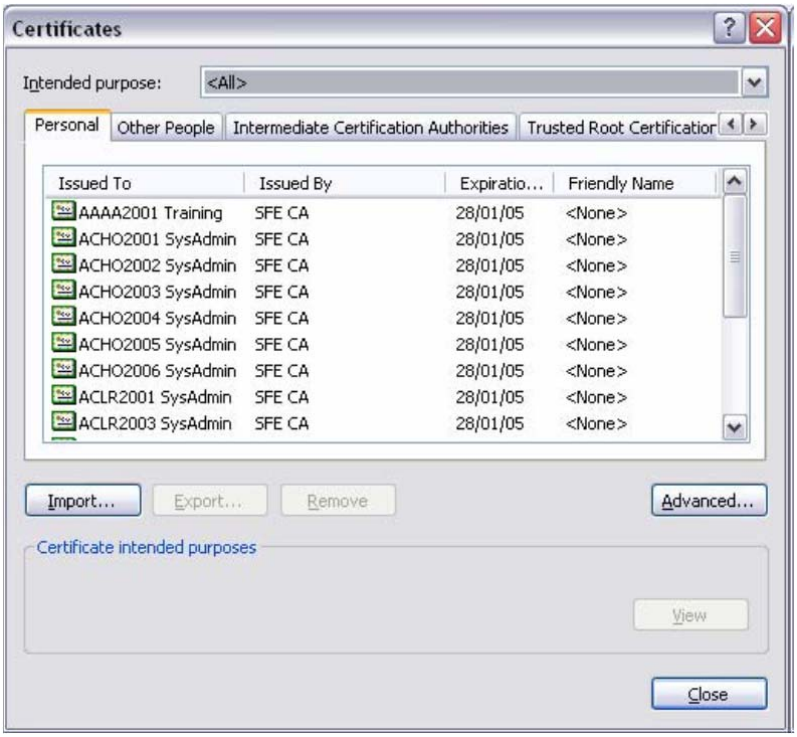
Certificate Export Wizard
Export File Format
Certificates can be exported in a variety of file formats.
Select the format you want to use:
DER encoded binary X.509 (.CER)
Base-64 encoded X.509 (.CER)
Cryptographic Message Syntax Standard - PKCS #7 Certificates (.P7B)
Include all certificates in the certification path if possible
Personal Information Exchange - PKCS #12 (.PFX)
Include all certificates in the certification path if possible
Enable strong protection (requires IE 5.0, NT 4.0 SP4 or above)
Delete the private key if the export is successful
< Back
Next >
Cancel

6. Click on the 'Browse' button to select the destination for the export of the certificate.
7. Once this has been confirmed, click 'Next', then click 'Finish'.
8. A confirmation box will appear confirming that the export was successful.

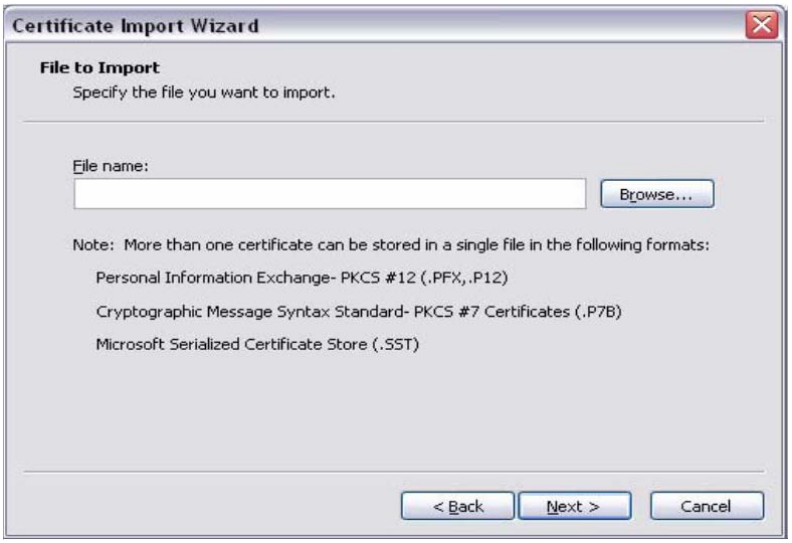
10.2.4.2. Importing a Certificate

1. In Internet Explorer, Click on the 'Tools' menu, then 'Internet Options'.
2. Select the 'Content' tab and then click on the 'Certificates' button.
3. In the Certificates window, click Import.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

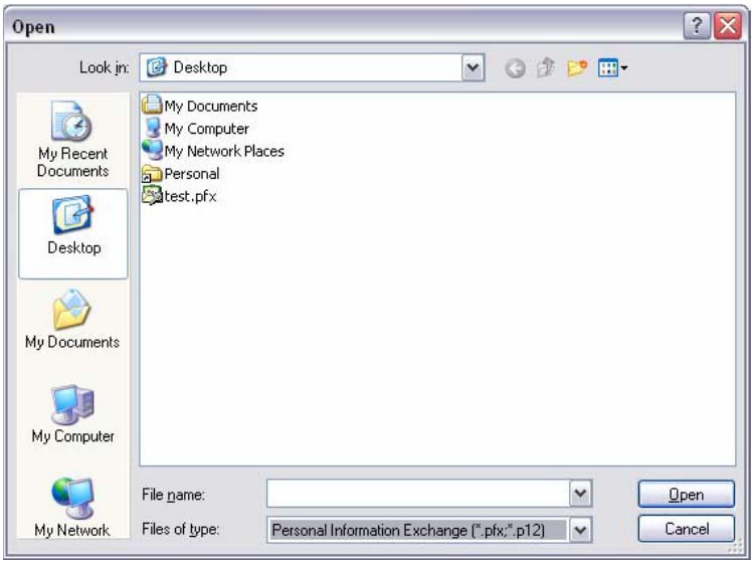


4. The Certificate Import Wizard window appears.
5. Please click 'Next'.
6. Click 'Browse' to navigate to the location where the certificate was originally exported to.


Certificate Import Wizard
File to Import
Specify the file you want to import.
File name:
Browse...
Note: More than one certificate can be stored in a single file in the following formats:
Personal Information Exchange- PKCS #12 (.PFX,.P12)
Cryptographic Message Syntax Standard- PKCS #7 Certificates (.P7B)
Microsoft Serialized Certificate Store (.SST)
< Back
Next >
Cancel

7. Please ensure that you change the file type from the default X 509 *Certificate to Personal Information Exchange (*.pfx)* in the File of Type drop down box.
8. Select the certificate that you wish to import and click 'Open'. Click 'Next' to proceed.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014



9. You will then be prompted for the password for the private key. This is the same password that was used when exporting the certificate originally. You are required to enter the password for the private key and then click 'Next'.
10. Windows will then allow you to select where you have the certificate stored.
11. Click 'Next' once completed.

Certificate Import Wizard
Password
To maintain security, the private key was protected with a password.
Type the password for the private key.
Password:
Enable strong private key protection. You will be prompted every time the private key is used by an application if you enable this option.
Mark this key as exportable. This will allow you to back up or transport your keys at a later time.
< Back
Next >
Cancel

12. Click 'Finish' to complete the *Certificate Import Wizard*. A confirmation box will appear confirming that the import was successful.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

13. The certificate has now been successfully exported and imported.

10.3. Appendix 3 – Troubleshooting

10.3.1. Browser-related Error Messages

10.3.1.1. This website only supports Internet Explorer 7, 8 and 9 Issue

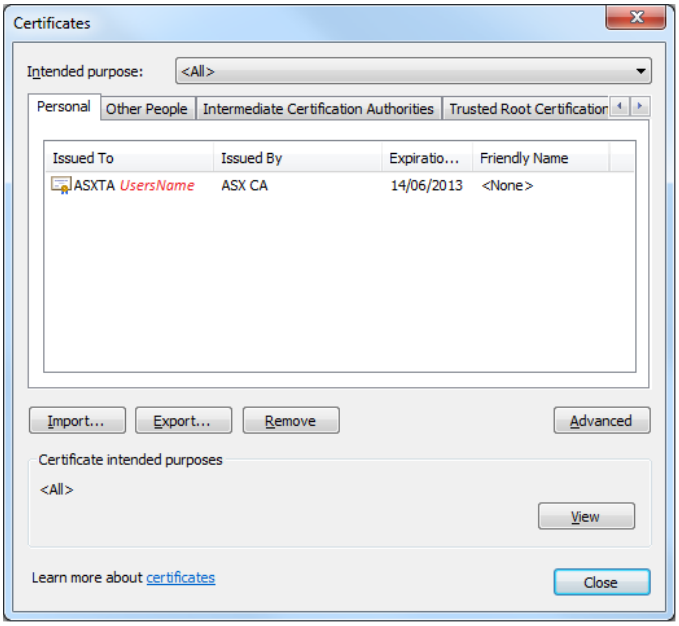
The application will automatically check your browser for compatibility. You will need to try a different browser version if you try to access the site and get the message.

Please note that the current implementation does not support Internet Explorer 6.

10.3.1.2. HTTP 403 Forbidden Issue

Why do I get the error message, "HTTP 403 Forbidden"?

This can happen if there is not a valid digital certificate stored on the computer. You can check your certificate in Internet Explorer by going to Tools-> Internet Options -> Content -> Certificates>Personal. The certificate issued should match your login name.



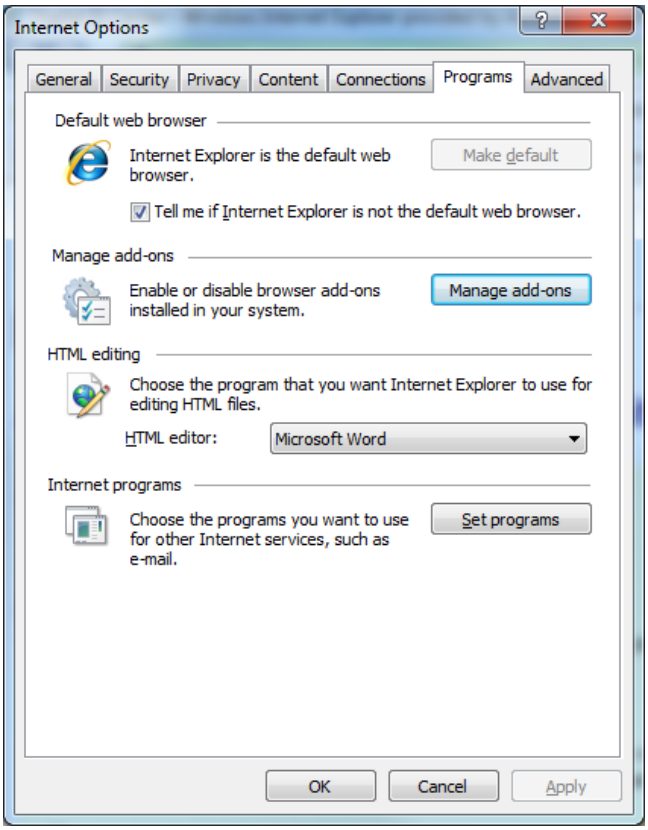
10.3.1.3. JavaScript Issue

Why do I get the error message, "JavaScript must be enabled to use this site. Please enable JavaScript in your browser and try again"?

The application checks to see if JavaScript is enabled before it renders the pages in full. If JavaScript is not enabled, you will not be able to enter any data.

It should be possible to enable JavaScript through the 'Internet Options>Programs>Manage add-ons>Toolbars and Extensions section of your browser. Consult Internet Explorer Help for more information on how to do this for your browser version.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014



It might be necessary to shut down all instances of Internet Explorer before changes take effect.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

10.3.2. Digital Certificate Issues

Most problems and errors that encountered relating to digital certificates occurred during enrolment, download, installation and importing and exporting. If several key pieces of information are known and precautions taken, most of the problems and errors outlined in this document can be prevented.

Below is a summary of the key information that can prevent most of the problems and errors occurring.

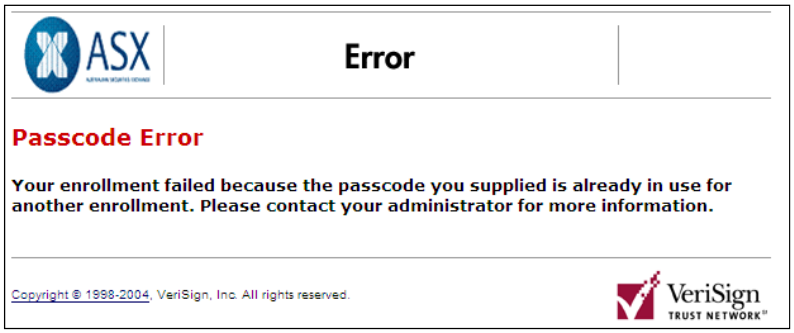
10.3.2.1. Issues with Enrolment for a Digital ID:

- Ensure Check ActiveX Controls are enabled.
- If operating system is Windows XP, ensure Onsite MSI package is installed.
- Enrolment can only occur once for each passcode, so ensure details are correct. There are five fields which are mandatory to be entered (First Name, Last Name, Your E-mail Address, Passcode and Challenge Phrase). Note that it is not mandatory to check the "Protect Your Private Key" checkbox or to enter comments. During this process, there are three possible errors:
  - Incorrect Passcode

  If invalid username or passcode is entered, then the following error message will be displayed:

  - Passcode "Already In Use"

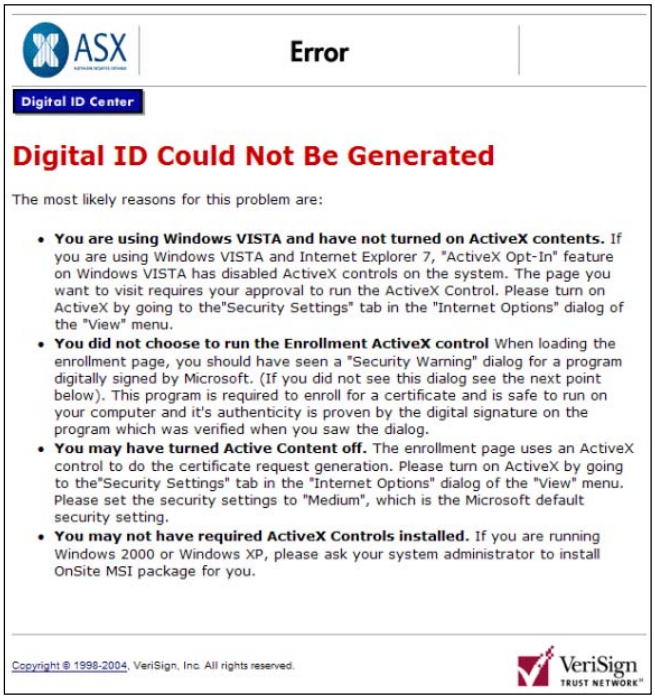
  If the passcode selected has already been used to generate a digital id, then the following error message will be displayed:


ASX
Error
Passcode Error
Your enrollment failed because the passcode you supplied is already in use for another enrollment. Please contact your administrator for more information.
Copyright © 1998-2004, VeriSign, Inc. All rights reserved.
VeriSign
TRUST NETWORK

  - Digital ID Could Not Be Generated

  If there is an issue with ActiveX controls for the browser, this error will occur.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014


ASX
Error
Digital ID Center
Digital ID Could Not Be Generated
The most likely reasons for this problem are:
You are using Windows VISTA and have not turned on ActiveX contents. If you are using Windows VISTA and Internet Explorer 7, "ActiveX Opt-In" feature on Windows VISTA has disabled ActiveX controls on the system. The page you want to visit requires your approval to run the ActiveX Control. Please turn on ActiveX by going to the"Security Settings" tab in the "Internet Options" dialog of the "View" menu.
You did not choose to run the Enrollment ActiveX control When loading the enrollment page, you should have seen a "Security Warning" dialog for a program digitally signed by Microsoft. (If you did not see this dialog see the next point below). This program is required to enroll for a certificate and is safe to run on your computer and it's authenticity is proven by the digital signature on the program which was verified when you saw the dialog.
You may have turned Active Content off. The enrollment page uses an ActiveX control to do the certificate request generation. Please turn on ActiveX by going to the"Security Settings" tab in the "Internet Options" dialog of the "View" menu. Please set the security settings to "Medium", which is the Microsoft default security setting.
You may not have required ActiveX Controls installed. If you are running Windows 2000 or Windows XP, please ask your system administrator to install OnSite MSI package for you.
Copyright © 1998-2004, VeriSign, Inc. All rights reserved.
VeriSign
TRUST NETWORK

This issue may occur on a XP machine that did not have the required ActiveX Controls installed. Installation of the Onsite MSI package resolved this issue and allowed the digital certificate to be downloaded. Please refer to your internal technical support for further information relating to this.

10.3.2.2. Issues with Download and Installation of a Digital Certificate

- Ensure user has clicked on “Install CA” from the Digital Id Centre site to install the CA.
- Ensure above-mentioned CA has been installed to “Trusted Root Certification Authorities”.
- During installation, select the format ‘My ID for Microsoft Internet Explorer…’
- Download can only occur once, so the user should not delete their digital certificate.

10.3.2.3. Issues with Importing and Exporting Digital Certificates

- Private keys must be included in any import or export (ie. ensure .pfx format is imported/exported, not .cer).
- PKCS#12 format must be used (it is specifically designed for private keys).

10.3.2.4. Digital Download and Installation Issues

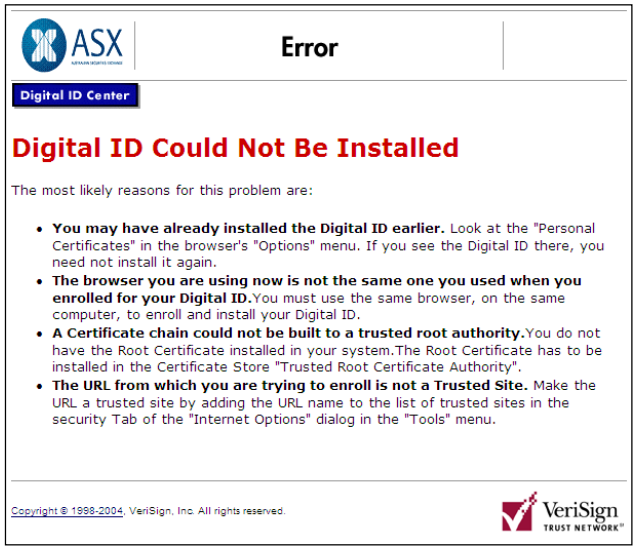
Once the user’s Digital ID has been generated, it needs to be downloaded and installed on the user’s machine. This process is attempted directly after enrolment.

During this process, there are two errors that are possible.

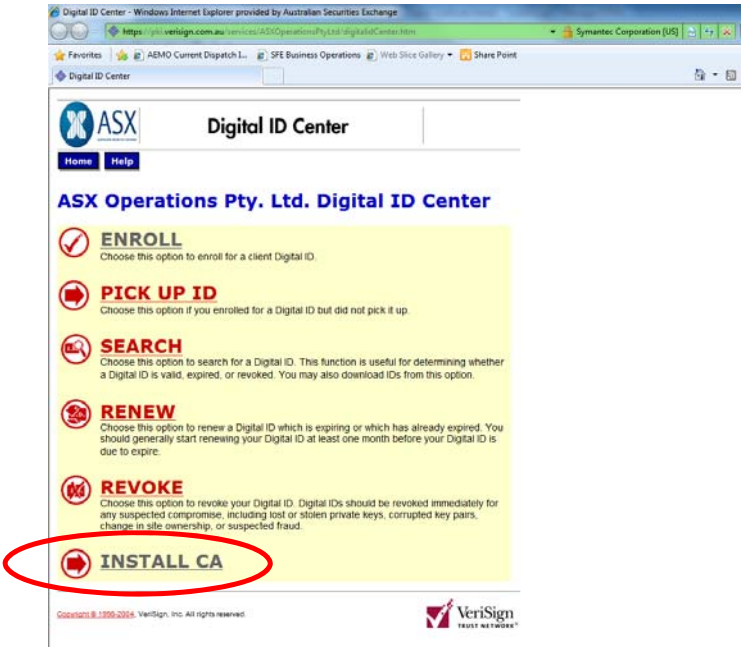
10.3.2.5. Digital Certificate Could Not Be Installed

This error occurs for a variety of reasons listed below in the error:

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014


ASX
Error
Digital ID Center
Digital ID Could Not Be Installed
The most likely reasons for this problem are:
You may have already installed the Digital ID earlier. Look at the "Personal Certificates" in the browser's "Options" menu. If you see the Digital ID there, you need not install it again.
The browser you are using now is not the same one you used when you enrolled for your Digital ID. You must use the same browser, on the same computer, to enroll and install your Digital ID.
A Certificate chain could not be built to a trusted root authority. You do not have the Root Certificate installed in your system. The Root Certificate has to be installed in the Certificate Store "Trusted Root Certificate Authority".
The URL from which you are trying to enroll is not a Trusted Site. Make the URL a trusted site by adding the URL name to the list of trusted sites in the security Tab of the "Internet Options" dialog in the "Tools" menu.
Copyright © 1998-2004, VeriSign, Inc. All rights reserved.
VeriSign
TRUST NETWORK

This error occurs because the root certificate has not been installed. By returning to the Digital ID Centre website: https://pki.verisign.com.au/services/ASXOperationsPtyLtd/digitalidCenter.htm


Digital ID Center - Windows Internet Explorer provided by Australian Securities Exchange
Digital ID Center
ASX
Digital ID Center
Home
Help
ASX Operations Pty. Ltd. Digital ID Center
ENROLL
Choose this option to enroll for a client Digital ID.
PICK UP ID
Choose this option if you enrolled for a Digital ID but did not pick it up.
SEARCH
Choose this option to search for a Digital ID. This function is useful for determining whether a Digital ID is valid, expired, or revoked. You may also download IDs from this option.
RENEW
Choose this option to renew a Digital ID which is expiring or which has already expired. You should generally start renewing your Digital ID at least one month before your Digital ID is due to expire.
REVOKE
Choose this option to revoke your Digital ID. Digital IDs should be revoked immediately for any suspected compromise, including lost or stolen private keys, corrupted key pairs, change in site ownership, or suspected fraud.
INSTALL CA
VeriSign
TRUST NETWORK

And by clicking on “Install CA”, this issue was resolved (note it must be installed in the “Trusted Root Certification Authorities” store, otherwise the issue will not be resolved).

10.3.2.6. ID Format Unselected

If a user does not select / specify an ID format from the dropdown list, then the following error message is displayed:

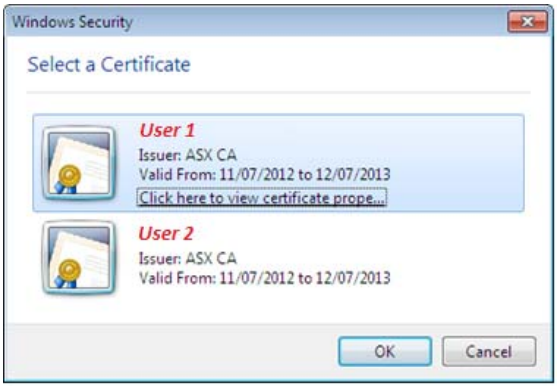
© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

ASX
Error
Digital ID Center
Online Enrollment Status: 8b4c0
If you continue to get this error, and are sure that you entered all of the information, contact the administrator.
Copyright © 1998-2004, VeriSign, Inc. All Rights Reserved
VeriSign
TRUST NETWORK

10.3.2.7. Using Digital Certificates Issues

After a digital certificate has been installed, it can be used to log into ASX Clear (Futures) Margin Simulator.

Before the ASX Clear (Futures) Margin Simulator website can be opened, it will require the user to select a digital certificate to use as part of authentication. A list of all available digital certificates installed on the user's machine will be available to be selected. In the figure below, two digital certificates are available for selection (*User 1* and *User 2*):

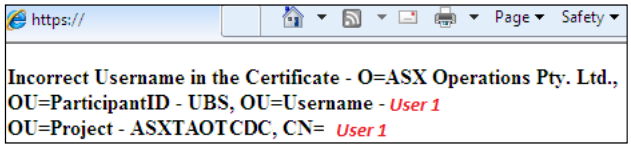


10.3.2.8. Digital Certificate Revoked

An "Incorrect Username in the Certificate" error message will be displayed when a user attempts to log into ASX Clear (Futures) Margin Simulator:

- When their digital certificate has been revoked.
- Using another person's digital certificate.

Below is an example of the error message:


https://
Page
Safety
Incorrect Username in the Certificate - O=ASX Operations Pty. Ltd., OU=ParticipantID - UBS, OU=Username - User 1
OU=Project - ASXTAOTCDC, CN= User 1

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

10.3.3. Margin Simulator Access Issues

10.3.3.1. Cannot view margin Simulator link on the application Selection Page.

If the users have valid ASX Online login credentials and valid SSO certificate, they will be able to access the application selection page. However if they have not been enabled for ASX Clear (Futures) Margin Simulator they will not be able to view the access link. For any support regarding Margin Simulator access please contact ASX Service Desk.

10.3.3.2. On Clicking the Margin Simulator link, access denied error is displayed

If the users can view the Margin Simulator link on the application selection page, they have been enabled for ASX Clear (Futures) Margin Simulator. Access denied message on clicking the Margin Simulator link implies that there is an issue with user's firm access. The user must follow the instructions on the screen.

© Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014

Disclaimer

This document provides general information only and may be subject to change at any time without notice. ASX Limited (ABN 98 008 624 691) and its related bodies corporate ("ASX") makes no representation or warranty with respect to the accuracy, reliability or completeness of this information. To the extent permitted by law, ASX and its employees, officers and contractors shall not be liable for any loss or damage arising in any way, including by way of negligence, from or in connection with any information provided or omitted, or from anyone acting or refraining to act in reliance on this information. The information in this document is not a substitute for any relevant operating rules, and in the event of any inconsistency between this document and the operating rules, the operating rules prevail to the extent of the inconsistency. © Copyright 2014 ASX Limited ABN 98 008 624 691. All rights reserved 2014.

ASX Trademarks

The trademarks listed below are trademarks of ASX. Where a mark is indicated as registered it is registered in Australia and may also be registered in other countries. Nothing contained in this document should be construed as being any licence or right to use of any trademark contained within the document.

ASX®